

Amendments to the Specification:

Please amend paragraphs [0074], [0077], [0078], [0082], [0084] and [0085] as follows:

[0074]

To stabilize the gas flow in this way, when a certain time such as 6 seconds has elapsed (step S3), the aperture is fixed at time t2 by fixing the valve drive voltage S2 ~~at that time~~ to the voltage level at that time (step S4). When the valve drive voltage S2 has thus been fixed and several seconds have elapsed, the pressure of the gas flow from the pressure detecting means 46 at that time and the tank temperature from the temperature detection means 51 at that time are recorded, serving as the initial pressure MPO and initial temperature MTO °C, respectively (step S5).

[0077]

The changes in the pressure of the gas flow at this time are measured, for example, in 1 msec intervals (step S7) to obtain the pressure change characteristics ~~at that time~~. The gas pressure is measured continuously until the gas pressure reaches a predetermined minimum level, and the gas flow is stopped when the minimum level is reached (step S8). This time is time t4. The pressure change data obtained above is stored as the standard pressure change characteristics in the standard data memory 52A (step S9). In this way, the standard pressure change characteristics at the set flow of an aperture of 100% are obtained.

[0078]

These standard pressure change characteristics may be preferably acquired for a plurality of apertures. For example, the aperture (flow) may preferably be varied in 10% increments, and the standard pressure change characteristics for each may be obtained. For example, a minimum aperture (flow) may be 10%. The detected flow setting is lowered a certain amount, such as 10%, while the detected flow setting is not at the minimum (step S10: No). The detected flow setting is set to 90%, at this stage (step S11). The above steps S3 through S9 are repeated until the aperture reaches the minimum. In this way, different standard pressure change characteristics are obtained in aperture increments of 10%, and the data is ~~[[all]]~~ stored in the standard data memory 52A, thereby completing the standard pressure change characteristics measurement routine.

<Verification routine>

[0082]

To stabilize the gas flow in this way, when a certain time such as 6 seconds has elapsed (step S23), the aperture is fixed at time t2 by fixing the valve drive voltage S2 ~~at that time~~ to the voltage level at that time the (step S24). When the valve drive voltage S2 has thus been fixed and several seconds have elapsed, the pressure of the gas flow from the pressure detecting means 46 at that time and the tank temperature from the temperature detection means 51 at that time are recorded, serving as the initial pressure PO and initial temperature TO °C, respectively (step S25).

[0084]

The changes in the pressure of the gas flow at this time are measured, for example, in 1 msec intervals (step S27) to obtain the pressure change characteristics ~~at that time~~. The gas pressure is measured continuously until the gas pressure reaches a predetermined minimum level, and the gas flow is stopped when the minimum level is reached (step S28). This time is time t4. The pressure change data obtained above is stored as the test pressure change characteristics in the verification data memory 52B (step S29). In this way, the standard pressure change characteristics at the set flow of an aperture of 100% are obtained.

[0085]

These test pressure change characteristics may be preferably acquired for a plurality of apertures in the same manner as for the standard pressure change characteristics. For example, the aperture may preferably be varied in 10% increments, and the test pressure change characteristics for each may be obtained. For example, a minimum aperture may be 10%. The detected flow setting is lowered a certain amount, such as 10%, while the detected flow setting is not at the minimum (step S30: No). The detected flow setting is set to 90%, at this stage (step S31). The above steps S23 through S29 are repeated until the aperture reaches the minimum. In this way, different test pressure change characteristics are obtained in aperture increments of 10%, and the data is ~~[[all]]~~ stored in the verification data memory 52B, thereby completing the test pressure change characteristics measurement routine.